

**Abstract**

A system 10 for detecting sliding of a wheel 12 on a rail 14 includes a roller 16 disposed adjacent the rail 14 so that a wheel 12 travelling along the rail 14 can engage the roller 16, and a tachometer 18 coupled with the roller 16 for providing a rotation signal representative of the degree of rotation of the roller. The system 10 includes a computer 20 which receives the rotation signal from the tachometer 18 and by using an appropriate rotation algorithm calculates the degree of rotation of the roller 16. The computer 20 then compares the degree of rotation with a predetermined range of roller rotations and, if the calculated degree of rotation of the roller is less than predicted by analysis, the apparatus 10 provides a signal indicative of the wheel 12 sliding.